

## **Medium Extended Air Defense System (MEADS)**

Medium Extended Air Defense System (MEADS) program is a transatlantic cooperative effort between the United States, Germany, and Italy to develop an air and missile defense system that is mobile and transportable. It will be capable of countering ballistic missiles and airbreathing threats such as aircraft, -unmanned aerial vehicles, and cruise missiles. MEADS will improve the limited area defense of vital assets, both civilian and military, defend troops and fixed assets, as well as provide capability to move with and protect the maneuver of forces.

MEADS role in ballistic missile defense will be to bridge the gap between man-portable systems like the Stinger missile and the higher levels of the Ballistic Missile Defense System (BMDS), such as the Theater High Altitude Area Defense (THAAD) system, while providing continuous coverage for rapidly advancing maneuver forces. MEADS also offers the opportunity for U.S. forces to work in conjunction with the allied



forces. As U.S., Germany and Italy are planning to co-develop and use MEADS, its commonality of system design will contribute to the interoperability of U.S. and allied forces ballistic missile defense systems.

MEADS will be a mobile surface to air missile (SAM) system designed to provide a short-range defense for troops and installations against several sophisticated threats. Mounted on a wheeled vehicle, MEADS will use a vertical launcher capable of holding several interceptors and contain advanced radars that provide 360-degree coverage. The interceptor missile will be hit-to-kill, (directly hitting the target to destroy it), and have an enhanced warhead for use against air breathing targets. Initially, MEADS will employ the PAC-3 missile as its interceptor.

All components will be linked to state of the art communications, including access to a broad range of sensors from other systems and services. These capabilities will ensure that MEADS is part of the overall BMDS and compatible with other Army, joint, and allied systems. The system is also designed to decrease U.S. transportation requirements for deployment of missile defense systems.

The international nature of MEADS increases the potential for the program to promote interoperability of U.S. and allied forces and to aid trans-Atlantic defense cooperation. In turn, this could reinforce good relations between the U.S. and Europe. Indeed, MEADS reaffirms the United States' commitment to stay involved in European security affairs and could spark a renaissance in trans-Atlantic cooperation.

The MEADS project will pass through three phases: The participating countries will negotiate a Memorandum of Understanding for each of these phases, Product Definition/Validation (PD/V), Design and Development (D&D), and Production. MEADS is currently in the first stage, PD/V. In 1999, MEADS was restructured to add a Risk Reduction Effort (RRE) to the PD/V phase. The primary objectives of MEADS RRE are to: (1) demonstrate an integrated MEADS system concept incorporating the PAC-3 missile, (2) reduce the overall program's technical, schedule, and cost risk, and (3) develop the international cost and schedule consensus for the MEADS program.

The U.S. signed the MEADS MOU Amendment II in December 2000, Italy signed in April 2001, and Germany signed in June 2001. The RRE contract, with MEADS International, was signed in July 2001. There is one year remaining until completion of the RRE contract, which is currently on schedule and on budget. Should the decision be made to allocate resources to move MEADS through to the Production phase, low rate initial production could start in 2009. Following operational test and evaluation of these initial systems, MEADS could enter full rate production. The first MEADS units could reach the field as early as 2012.

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http://www.acq.osd.mil/bmdo/bmdolink/html/